## ABSTRACT OF THE DISCLOSURE

## SYSTEM AND METHOD FOR THE DETECTION OF PRESENCE OF A SIGNAL AND ITS SYNCHRONIZATION, FOR A FREQUENCY-HOPPING SYSTEM WORKING IN A DISTURBED ENVIRONMENT

A method and device for the detection and synchronization of a signal in a frequency-hopping system, the method comprising at least the following steps: for each frequency F(1)...F(M), selecting the K samples corresponding to the greatest values of the signal, and their positions; combining, for a given position, the M greatest values selected from among K on each frequency having said position, and keeping the greatest combined value and the corresponding position; comparing the greatest combined value with a threshold value, and if it is greater than this threshold value, then declaring the detection of the signal.